

REMARKS

Claims 1-10 (the Office Action states that 1-9 are pending) are pending in the application; the status of the claims is as follows:

Claims 1, 2, 3, and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,630,959 B1 to Shono (“Shono”) in view of U.S. Patent No. 5,860,034 to Hori (“Hori”).

Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Shono in view of Hori as applied to claim 1 above, and further in view of U.S. Patent No. 6,249,650 B1 to Iwamoto (“Iwamoto”).

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Shono in view of Hori as applied to claim 1 above, and further in view of U.S. Patent No. 6,266,083 B1 to Sakaegi et al (“Sakaegi”).

Claims 4 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shono in view of Hori as applied to claim 9 above, and further in view of U.S. Patent No. 5,150,215 to Shi (“Shi”).

Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Shono in view of Hori, in further view of Sakaegi as applied to claim 6 above, and further in view of Shi.

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The indication, in the Office Action, that the Examiner has no objections to the drawings filed on December 15, 2003, is noted with appreciation.

35 U.S.C. § 103(a) Rejections

The rejection of claims 1, 2, 3, and 9 under 35 U.S.C. § 103(a), as being unpatentable over Shono in view of Hori, is respectfully traversed based on the following.

Shono shows a quick return mirror 11 used to direct a through-the-lens image to a view finder (reflection mirror 14, relay lens 15 and eyepiece 16). In the normal position, the image from the photographing lens 10 is split between the view finder and CCD 12. When the shutter is depressed, the quick return mirror is pulled to a retracted position to provide an unobstructed path from the photographing lens to the CCD. To prevent extraneous light reflecting from the back of the quick return mirror onto the CCD when the CCD is in a retracted position, an anti-reflection plate 24 is raised to cover the back of the quick return mirror when the quick return mirror is in the retracted position.

Hori shows a light shielding plate 12 that blocks the eye piece when the shutter drive member 8 is depressed. This prevents light from entering the camera via the eye piece during picture acquisition. (column 1, lines 14-25).

In contrast to the cited references, claim 1 includes:

a light splitter which is movable between a first position to divide light transmitted through the taking lens to the image sensor and the finder and a second position in which the light splitter is away from the light transmitted through the taking lens and the light is directed only to the image sensor;

a driver which moves the light splitter to the first position and the second position; and

a controller which controls the light splitter to a semi-transparent state in the first position and a blocking state in the second position.

It is clear that none of the cited references shows a movable light splitter capable of a semi-transparent state and a blocking state. The Office Action states that it would have been obvious to one skilled in the art to modify the disclosures of the references to meet the claimed limitations. Applicants disagree with this analysis.

Hori explicitly relates to a single-lens reflex (SLR), through-the-lens photometry type camera. (column 1, lines 8-24). Thus, Hori and his co-inventors were applying teaching to a camera that included a reflex mirror, such as mirror 11 of Shono. Hori specifically states that the mirror in this type of camera swings up by stating that, in a second type of camera, the mirror does not swing up. (column 1, line 27). Further, Hori shows the control of the mirror at step S6 of Figure 3. In addition, Hori specifically identified the problem of extraneous light entering through the eye-piece. (column 1, lines 17-24).

Hori solved the problem by using a light shielding plate 12 on the eye-piece that closes when the shutter drive member 8 is depressed. Hori also suggests that the light shielding plate may be replaced with an LCD device (column 11, lines 50-59) and need not be positioned at the eye-piece (column 11, lines 50-67). In spite of this, there is absolutely no suggestion in Hori or any of the cited references to combine the light shielding function with the reflex mirror. MPEP §2143.01. Thus, the cited limitations were not obvious to the skilled inventors of the Hori patent.

Furthermore, Hori adds an entirely new mechanism to an already complex SLR camera. As is well known in the art, every new mechanism adds additional expense and an additional opportunity for reliability problems. Applicants' invention accomplishes the stated goal of Hori using an existing mechanism. No significant additional mechanism beyond those already present in an SLR camera is necessary. Thus, Applicants' invention accomplishes the stated goal at reduced cost and with greater reliability. In spite of these advantages, there is no suggestion in Hori or any other cited reference of the quoted claim limitations. That there is no mention or suggestion of the quoted claim limitations in any of the cited references in spite of the clear technical advantages of an apparatus meeting those limitations are strong evidence that those limitations were not obvious to those skilled in the art.

To bolster the case that a light splitter using an LCD mechanism was known, the Office Action cites McAdams (U.S. Patent No. 4,822,141). However, reliance on this reference is misplaced. McAdams splits a light beam into two components having opposite polarizations. Thus, the split beams (T_E and T_M) are not identical. For use in an SLR, the split beams may have different intensities, but their composition must be nearly identical. Therefore, one skilled in the art would not use the splitter shown in McAdams in a camera.

In summary, the quoted claim limitations are neither shown nor suggested by the cited references. To support a *prima facie* case for obviousness, the cited references must show or suggest every limitation of the claim. MPEP §2143.03. Therefore, claim 1 is non-obvious and patentably distinct from the cited references. Claims 2 and 3 are dependent upon claim 1. A claim that depends from a non-obvious claim is also non-obvious. MPEP §2143.03.

Also in contrast to the cited references, claim 9 includes a method for controlling a splitter in a camera that includes the steps of:

controlling the splitter to a semi-transparent state in the first position; and
controlling the splitter to a blocking state in the second position.

As noted above, the cited references do not show or suggest a using a reflex splitter for blocking light from the viewfinder system. Therefore, the cited references do not show or suggest every limitation of the claim and claim 9 is non-obvious over the cited references.

Accordingly, it is respectfully requested that the rejection of claims 1, 2, 3, and 9 under 35 U.S.C. § 103(a) as being unpatentable over Shono in view of Hori, be reconsidered and withdrawn.

The rejection of claim 8 under 35 U.S.C. § 103(a), as being unpatentable over Shono in view of Hori as applied to claim 1 above, and further in view of Iwamoto, is respectfully traversed based on the following.

Iwamoto shows a switch 17 that may be used to manually change the position of the reflex or quick return mirror 33. However, as noted above, the cited references do not show or suggest the limitations of claim 1 quoted above. Iwamoto also does not show or suggest these limitations. Claim 8 is dependent upon claim 1 and thus includes every limitation of claim 1. Therefore, the cited references do not show or suggest every limitation of claim 8 and claim 8 is patentably distinct from the cited references.

Accordingly, it is respectfully requested that the rejection of claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Shono in view of Hori as applied to claim 1 above, and further in view of Iwamoto, be reconsidered and withdrawn.

The rejection of claim 6 under 35 U.S.C. § 103(a), as being unpatentable over Shono in view of Hori as applied to claim 1 above, and further in view of Sakaegi, is respectfully traversed based on the following.

Sakaegi shows a process for maintaining a reflex mirror in a retracted position while taking a plurality of images. However, as noted above, the cited references do not show or suggest the limitations of claim 1 quoted above. Sakaegi also does not show or suggest these limitations. Claim 6 is dependent upon claim 1 and thus includes every limitation of claim 1. Therefore, the cited references do not show or suggest every limitation of claim 6 and claim 6 is patentably distinct from the cited references.

Accordingly, it is respectfully requested that the rejection of claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Shono in view of Hori as applied to claim 1 above, and further in view of Sakaegi, be reconsidered and withdrawn.

Application No. 09/751,155
Amendment dated September 7, 2004
Reply to Office Action of March 11, 2004

The rejection of claims 4 and 10 under 35 U.S.C. § 103(a), as being unpatentable over Shono in view of Hori as applied to claim 9 above, and further in view of Shi, is respectfully traversed based on the following.

Shi shows a reflex mirror 12 system capable of directing the viewfinding image from the lens to either an eye-piece 16 or a sensor 21 for display of the viewfinding image on an LCD display. However, as noted above, the cited references do not show or suggest the limitations of claim 1 quoted above. Shi also does not show or suggest these limitations. Claim 4 is dependent upon claim 1 and thus includes every limitation of claim 1. Therefore, the cited references do not show or suggest every limitation of claim 4 and claim 4 is patentably distinct from the cited references.

Also as noted above, the cited references do not show or suggest the limitations of claim 9 quoted above. Shi also does not show or suggest these limitations. Claim 10 is dependent upon claim 9 and thus includes every limitation of claim 9. Therefore, the cited references do not show or suggest every limitation of claim 10 and claim 10 is patentably distinct from the cited references.

Accordingly, it is respectfully requested that the rejection of claims 4 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Shono in view of Hori as applied to claim 9 above, and further in view of Shi, be reconsidered and withdrawn.

The rejection of claim 7 under 35 U.S.C. § 103(a), as being unpatentable over Shono in view of Hori, in further view of Sakaegi as applied to claim 6 above, and further in view of Shi is respectfully traversed based on the following.

As noted above, the cited references do not show or suggest the limitations of claim 6 quoted above. Shi also does not show or suggest these limitations. Claim 7 is dependent upon claim 6 and thus includes every limitation of claim 6. Therefore, the cited references do not show or suggest every limitation of claim 7 and claim 7 is patentably distinct from the cited references.

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Accordingly, it is respectfully requested that the rejection of claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Shono in view of Hori, in further view of Sakaegi as applied to claim 6 above, and further in view of Shi, be reconsidered and withdrawn.

Wherefore, in view of the foregoing remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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